SANTA CRUZ BIOTECHNOLOGY, INC.

# LDLR (M-20): sc-11826

SANTA CRUZ BIOTECHNOLOGY

*The Power to Question*

## BACKGROUND

LDLR (low density lipoprotein receptor) is a member of the LDL receptor gene family, which includes LDLR, LRP, Megalin, VLDLR and apoER2. The LDL receptor family is characterized by a cluster of cysteine-rich class A repeats, epidermal growth factor (EGF)-like repeats, YWTD repeats and an O-linked sugar domain. The LDL receptor is a cell surface transmembrane protein that mediates the uptake of low density lipoprotein and its degradation in the lysosome, which provides cholesterol to cells. The cytoplasmic domain of the LDL receptor is necessary for the receptor to cluster in coated pits, which promotes the rapid endocytosis of bound LDL. Mutations in LDLR cause the autosomal dominant disease familial hypercholesterolemia (FH), which promotes premature coronary atherosclerosis.

## CHROMOSOMAL LOCATION

Genetic locus: LDLR (human) mapping to 19p13.3; Ldlr (mouse) mapping to 9 A3.

## SOURCE

LDLR (M-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of LDLR of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-1126 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

LDLR (M-20) is recommended for detection of LDLR of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for LDLR siRNA (h): sc-35802, LDLR siRNA (m): sc-35803, LDLR siRNA (r): sc-156112, LDLR shRNA Plasmid (h): sc-35802-SH, LDLR shRNA Plasmid (m): sc-35803-SH, LDLR shRNA Plasmid (r): sc-156112-SH, LDLR shRNA (h) Lentiviral Particles: sc-35802-V, LDLR shRNA (m) Lentiviral Particles: sc-35803-V and LDLR shRNA (r) Lentiviral Particles: sc-156112-V.

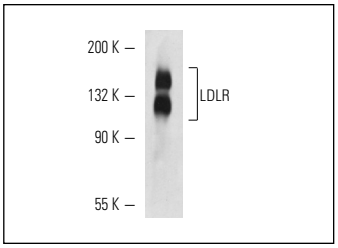
Molecular Weight of LDLR: 160 kDa.

Positive Controls: CCD-1064Sk cell lysate: sc-2263 or Raji whole cell lysate: sc-364236.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## DATA




LDLR (M-20): sc-11826. Western blot analysis of purified human LDLR.

## SELECT PRODUCT CITATIONS

1. Wakatsuki, S., et al. 2004. Lipid rafts identified as locations of ectodomain shedding mediated by Meltrin β/ADAM19. J. Neurochem. 89: 119-123.
2. Rocco, D.D., et al. 2011. Aerobic exercise improves reverse cholesterol transport in cholesteryl ester transfer protein transgenic mice. Lipids 46: 617-625.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.